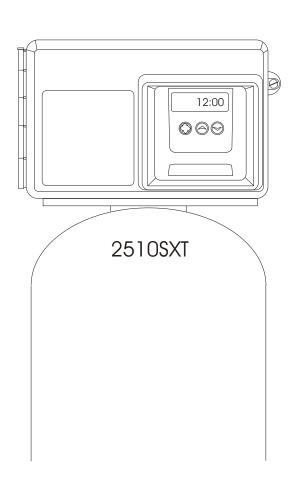
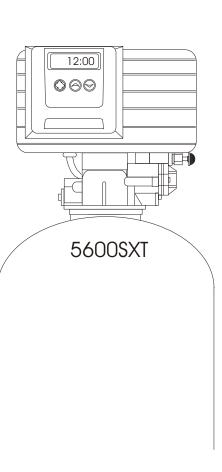
# **Iron Master**

Operation and service manual





### Iron Master Operating Manual

The Iron Master is an excellent way to remove iron and sulfur from your water.

Based on a unique patent protected (US Patent 5,919,373) process the Iron Master Removes iron effectively and economically without the need of expensive, messy, and dangerous chemicals or troublesome pumps or external air injectors.

The Iron Master can be used whenever iron is a problem. Years of field Experience with the Iron Master system has shown it will remove iron in Excess of 10 parts per million (PPM) and remain effective in high PH water.

#### How does it work?

The Iron Master adds oxygen to the filter media during the draw cycle. The Water then passes through the filter media which oxidizes and removes the iron (all in the same tank).

Eventually water passing through the Iron Master depletes the oxygen and the Unit needs regeneration.

During regeneration the iron is backwashed out. The tank then empties and replenishes the filter media with oxygen from the atmosphere and shifts back into service.

#### INSTALLATION

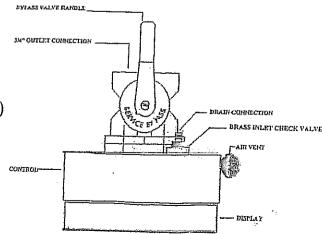
The Iron Master will normally be installed:

After: Supply line to outside faucets

Any Neutralizers

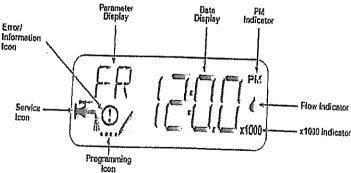
Before: A Water Softener

Any Taste and Odor Filters (Carbon)



## SYSTEM INSTALL AND START-UP

- 1. The Iron Master normally would be installed after supply lines to the outside (unless there is a reason to keep outside faucets iron-free) and after neutralizing filter if needed (Calcite, Corosex).
- 2. Run piping from drain connection to an approved drain, following all local codes. Secure the drain line! If distance is greater than 10' increase to 1" drain Line.
- 3. Plug power cord into any standard 120 V outlet. Make sure the outlet has continuous electrical power.
- 4. The display will light up and show a time.
- 5. Use up and down arrows to set correct time of day.
- 6. Turn the Bypass Valve to the "SERVICE" position
- 7. Fill unit SLOWLY by turning on the water service valve.
- 8. Leave the unit in the service position. It is not necessary to run the unit through the cycles.



## SETTING THE CONTROL

The Iron Master uses the Fleck model SXT powerhead to manage the regeneration process.

When the unit is in the "Service" position the display will show the current time of day. The clock uses a standard 12 hour clock

#### Setting the Control, Continued

The regeneration cycle is preset to occur at 12:30A.M. every third day. This timing and frequency of regeneration can be modified as required.

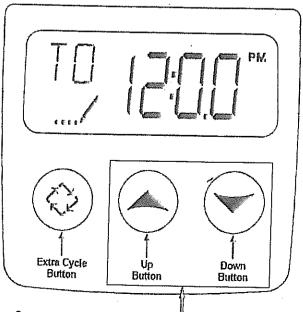
Nominal duration for the regeneration cycle is approximately 40 minutes.

- 1. Backwash cycle, 10 minute duration. Water flow is reversed inside the unit to lift and reclassify the filter media rinsing accumulated iron from the bed.
- 2. Oxygen refill, 40 minute duration. The unit empties of water and is filled with air. During this cycle water will run to drain. There is a slight delay at the start of the cycle while the pressure of the air within the tank reaches atmospheric pressure. During this time no air is drawn into the tank. Once the pressure has equalized, you will hear as air is drawn into the unit.
- 3. The unit returns to the In-Service position. When this happens water continues to enter the tank, compressing the air into a bubble in the top portion of the tank. Air bubble volume will vary slightly with the local conditions.

Untreated water is available during regeneration cycle.

Should you require the unit to regenerate at a time of day other than 12:30 A.M. it is important that no other unit, softener or filter, regenerates at the same time, This will interfere with the regeneration process.

In condition of high water usage and/or high levels of iron, the unit may need to regenerate more frequently than the standard three day cycle. The unit can be set for every other day regeneration or daily regeneration, as required. Do not set the regeneration frequency of longer than every three days as this risk fouling the filter medium and can, over time, render the unit inoperable.

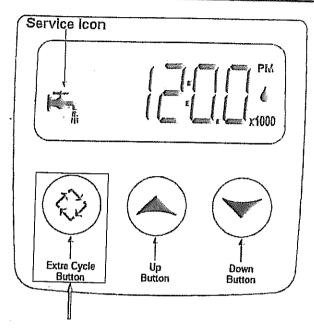


#### SETTING THE TIME OF DAY

- Press and hold the Up or Down buttons until the programming icon replaces the service icon and the parameter display reads TD.
- Adjust the displayed time with the Up and Down buttons.
- When the desired time is set, press the Extra Cycle button to resume normal

operation. The unit will also return to normal operation after 5 seconds if no buttons are pressed.

## INITIATING A REGENERATION



- ➢ Press the Extra Cycle button. The service icon will flash to Indicate that regeneration is queued.
- > To cancel a queued regeneration, press the Extra Cycle button.
- ➤ To regenerate immediately Press and hold the Extra Cycle button for 5 seconds.

## IRON MASTER PROGRAMMING

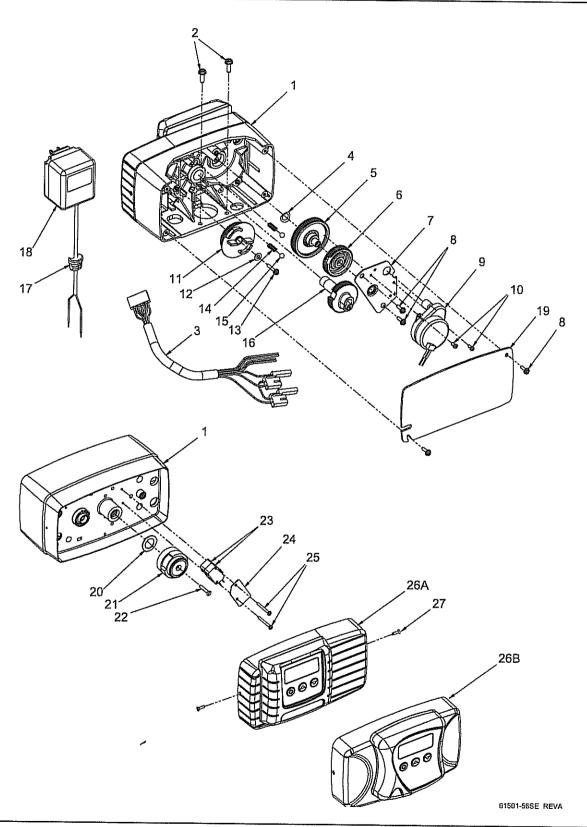
Press the Up or Down button for 5 seconds to enter The Time of Day Programming mode, set the Time of Day display to 12:01 P.M.

Press the Extra Cycle button once to exit the Time of Day programming mode.

With Time of Day Display set to 12:01 P.M., Push and hold the UP and Down buttons for 7 seconds.

- 1. DF GAL US Gallon display format (use up or down buttons to change setting) Hit Extra cycle button to advance to next setting.
- 2. VT St1b Standard Down flow, Single Backwash (Extra Cycle button)
- 3. CT tc Time Clock Control (Extra cycle button)
- 4. NT 1 Single tank system (Extra cycle button)
- 5. DO 3 Day Override (Extra cycle button)
- 6. RT 12:30 A.M. Time of Regeneration (Extra cycle button)
- 7. BW 14 Minutes 14 Minute backwash (Extra cycle button)
- 8. BD 40 40 Minute Air Draw (Extra cycle button)
- 9. RR Off (for 5600SXT) (1 Minute for 2510SXT)
- 10. Hit Extra Cycle button to return valve to service display, Set to correct time of day.

# Valve Powerhead Assembly

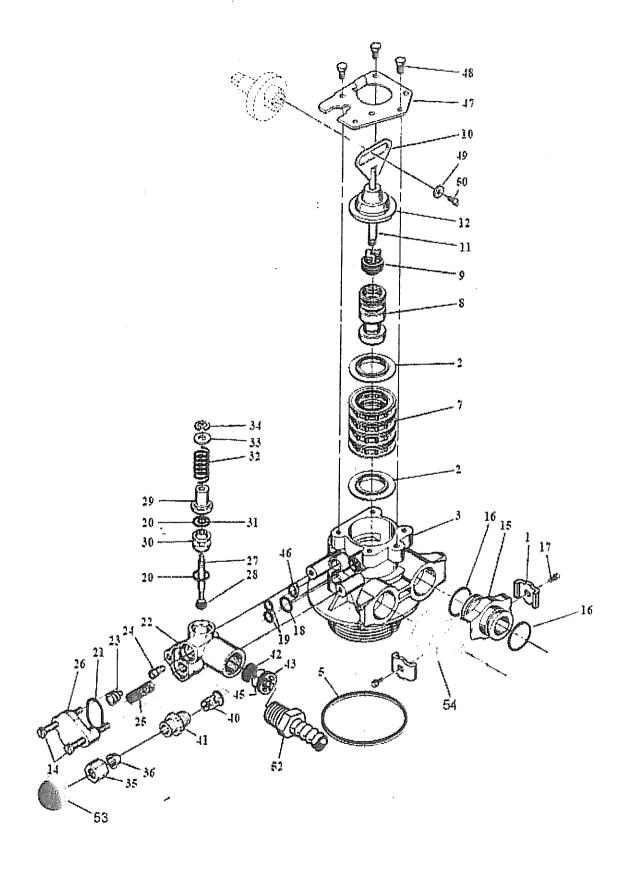


# Valve Powerhead Assembly

Item No.	Quantity	Part No.	Description
1	1	14448-100	Drive Housing Assy, with Pin, 56SXT
2	2	12473	Screw, Hex Wsh 10-24 x 5/8
3	1	19474	Harness, Power, 56SXT, Elect
4	1	13299	Washer, Spring, 3/8
		13017	
		23045	
7	1	13175	Plate, Motor Mounting
8	4	13296	Screw, Hex Wsh, 6-20 x 1/2
9	1	16944	Motor, Drive, 24V 60 Hz 2 rpm
10	2	11384	Screw, Phil, 6-32 x 1/4 Zinc
11	1	18722	Cam, Brine Valve, 56SXT/6700 Blk
12		12037	Washer, Plain, #10 18-8 Stainless Steel
13		40214	Screw, Hex Wsh, #6-20 x 3/4
14	2	19080	Spring, Compression, 6700
			Ball, 1/4" Stainless Steel
16	1	25005-10	Gear, Main Drive, SXT
			Strain Relief, Flat Cord
18	1	19674	Transformer, 24V, 9.6VA, Residential Valves
************		41475	Transformer, 24V, 9.6VA, European
19	1	40338	Cover, Back Drive Housing
		19079	
21	1	17438	Cam, 56SXT/6700, Downflow
**********		40609	Cam, Double Backwash, Downflow
22	1	15151	Screw, Flat Hd St, 6-20 x 3/4
		10218	
24	1	10302	Insulator, Limit Switch
			Screw, Phil, Pan, 4-40 x 1-1/8
26A	1	61672-0201	Front Panel Assy, 56SXT, Square, Black
26B	1	61673-0201	Front Panel Assy, 56SXT, Curved, Black
27	2	13898	Screw, Flat Hd, Phil Steel

#### Not Shown:

#### CONTROL VALVE ASSEMBLY



# Control Valve Assembly, Continued

ttem No.	Quantity	Part No.	Description
7	22	13255	Adapter Clip (Clock or Meter)
J	1	61400-12	Valve Body Assembly, 1 Dist.
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16	4	13305	Adapter Assy,Coupling,5600,w/O-rin O-ring, Adapter Coupling
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8	1	12638	O-ring Drain
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7	1.,,,,,,	13172	Brine Valve Stem
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)	1	13167	Brine Valve Cap Brine Valve Spacer
*************	1	13107	Brine Valve Spacer
	1	11072	Quad Ring Spring, Brine Valve
*******************	1	16000	Spring, Brine Valve
*****	1	11981-01	Washer, Brine Valve
	1	10200	Retaining Ring
	1	10329	BLFC Fitting Nut
*************	1	10329	BLFC Ferrule
	······ 1	41861	Neo Check
	I	13244	BLFC Fitting, 3/8
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	1	200 0000	Brass Inlet Check Valve

## RECOMMENDED IRON FILTER SERVICE KITS

# FILTERS WITH FLECK 5600 CONTROLS

1- 13446-41 End Plug assembly, Green 5- 18759 Seals, Low drive force 4- 12421 Spacers 1- 25005 Main drive gear	
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# FILTERS WITH FLECK 2510 CONTROLS

6- 42308 5- 11451 1- 10757 1- 10914-2 1- 10913-2 1- 14452 1- 10598	Seals, Silicone (proprietary) Spacers End Spacer Injector Throat #2, Blue Injector Nozzle #2, Blue Piston Rod End Plug Assembly
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